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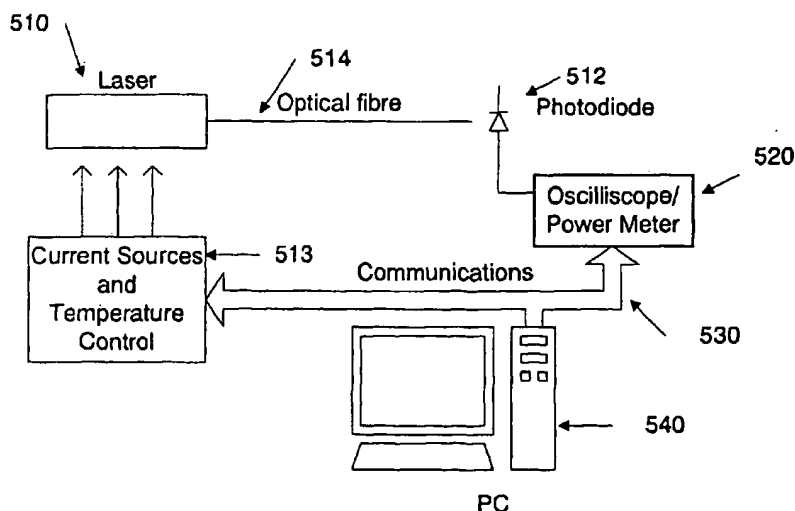
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- (74) Agents: LANE, Cathal, Michael et al.; Tomkins & Co., 5 Dartmouth Road, Dublin 6 (IE).
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- (71) Applicant (for all designated States except US): INTUNE TECHNOLOGIES LIMITED [IE/IE]; 9C Beckett Way, Park West Business Park, Dublin 12 (IE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): FARRELL, Tom [IE/IE]; 9C Beckett Way, Park West Business Park, Dublin 12 (IE). MOWSE, Edmund [GB/IE]; 9C Beckett Way, Park West Business Park, Dublin 12 (IE).
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(54) Title: METHOD AND SYSTEM FOR DETECTION OF REGIONS OF INSTABILITY IN MULTI-SECTION TUNABLE LASERS'



(57) Abstract: This invention relates to a method and system to detect hysteresis/unstable regions of multi-section lasers. The method comprises the steps of obtaining a first set of measurement values for the output of the laser diode by increasing a first current through a range of values in a positive direction, increasing a second control current by a step, obtaining a second set of measurement values for the output of the laser diode by decreasing the first control current through a range of values in a negative direction, and increasing a second control current by a step. The process is repeated until a sufficient range of the second control currents has been used to provide resultant data which can then be processed in order to identify regions of hysteresis of the laser diode.